CLAIMS

What is claimed is:

1. A communication method for use by a first gateway to communicate with a second gateway over a packet network, said first gateway capable of providing a communicating path to a user placing a call on a communication line, said first gateway having a plurality of modes of operation including a data mode and a voice mode, wherein said first gateway is configured differently for each of said modes of operation, said method comprising the steps of:

configuring said first gateway to said data mode of operation;

receiving a call from said user over said communication line;

enabling said first gateway to detect human voice and/or silence on said communication line;

maintaining said first gateway configured according to said configuring step in said data mode of operation if said first gateway does not detect human voice or silence on said communication line; and

reconfiguring said first gateway to said voice mode if said first gateway detects human voice or silence on said communication line.

2. The method of claim 1 further comprising the step of: informing said second gateway over said packet network of said mode of operation of said first gateway after said steps of maintaining and reconfiguring.

3. The method of claim 1, wherein said step of maintaining occurs if said first gateway does not detect human voice or silence on said communication line for a predetermined period of time.

4. The method of claim 1, wherein said data mode is a modem mode and said user is a modem device.

5. The method of claim 1, wherein said data mode is a modem mode and said user is a fax device.

6. The method of claim 1, wherein said data mode is a modem mode and said user is a TTY modem.

7. The method of claim 1, wherein in said data mode said first gateway uses a voice coder with higher bandwidth than in said voice mode.

8. The method of claim 7, wherein in said data mode said first gateway uses a G.711 voice coder and in said voice mode said first gateway uses a G.723.1 voice coder.

9. The method of claim 1, wherein said first gateway has a jitter buffer, and wherein said jitter buffer is larger in said voice mode than in said data mode.

10. The method of claim 1, wherein said first gateway has a jitter buffer, and wherein said jitter buffer is frozen in said data mode and is dynamic in said voice mode.

11. The method of claim 1 further comprising the step of: informing said second gateway over said packet network of said mode of operation of said first gateway if said first gateway detects human voice or silence on said communication.

12. A first gateway for communication with a second gateway over a packet network, said first gateway capable of providing a communicating path to a user placing a call on a communication line, said first gateway having a plurality of modes of operation including a data mode and a voice mode, wherein said first gateway is configured differently for each of said modes of operation, said first gateway comprising:

a configuration module configuring said first gateway to said data mode of operation;

a voice and/or silence detector enabled to detect human voice or silence on said communication line when said user places call on said communication line to said first gateway;

wherein said configuration module maintains said first gateway configured according to said data mode of operation if said voice and/or silence detector does not detect human voice or silence on said communication line, and said configuration module reconfigures said first gateway to said voice mode if said voice and/or silence detector detects human voice or silence on said communication line.

13. The first gateway of claim 12, wherein said first gateway informs said second gateway over said packet network of said mode of operation of said first gateway after said configuration module maintains said data mode configuration or reconfigures to said voice mode.

14. The first gateway of claim 12, wherein said configuration module maintains said data mode configuration if said voice and/or silence detector does not detect human voice or silence on said communication line for a predetermined period of time.

15. The first gateway of claim 12, wherein said data mode is a modem mode and said user is a modem device.

16. The first gateway of claim 12, wherein said data mode is a modem mode and said user is a fax device.

17. The first gateway of claim 12, wherein said data mode is a modem mode and said user is a TTY modem.

18. The first gateway of claim 12, wherein in said data mode said first gateway uses a voice coder with higher bandwidth than in said voice mode.

19. The first gateway of claim 18, wherein in said data mode said first gateway uses a G.711 voice coder and in said voice mode said first gateway uses a G.723.1 voice coder.

20. The first gateway of claim 12, wherein said first gateway has a jitter buffer, and wherein said jitter buffer is larger in said voice mode than in said data mode.

21. The first gateway of claim 12, wherein said first gateway has a jitter buffer, and wherein said jitter buffer is frozen in said data mode and is dynamic in said voice mode.

22. The first gateway of claim 12, wherein first gateway informs said second gateway over said packet network of said mode of operation of said first gateway if said first gateway detects human voice or silence on said communication.